

aperture, no spiral striation, and is smaller. *P. fieldii* Tryon is a much smaller shell without spiral lines, and higher relative to its diameter.

Probably all of this group should be regarded as toothless forms of *Planorbula*.

GUATEMALAN NOTES.

BY A. A. HINKLEY.

Coelocentrum gigas Von Martens, identified by Dr. H. A. Pilsbry as a dark variety,¹ is the largest land shell the writer ever had the pleasure of hunting. On Feb. 20, 1913, the first dead specimen was found by a large log in a banana field. Probably an hour was spent searching for a live one but without success. Leaving the banana field, I followed up a branch of the Cavech River to where it issued from the mountain side. The labor of working through jungle and over rocks was rewarded by finding the finest specimens of *Pachycheilus indiorum* which I secured. From here the return was around the side of another mountain, heavily wooded; on this mountain 5 living *C. gigas* were found. This was considered a great find.

The next day another place was visited beyond the mouth of the Cavech River to where the mountain came out to the shore of the gulf. After working through the thick undergrowth at the foot of a mountain, the vegetation was more open, making it easier to climb up or down. The first shell found was a fine *C. gigas* in the act of depositing eggs in a round pit about $\frac{3}{4}$ of an inch across, and probably a half-inch deep, scooped out of the mellow earth and containing 35 to 40 eggs.

The best part of the day was spent on this mountain, looking for these shells, of which 19 were secured. They were nearly always partly covered with leaves. No more nests of eggs were found, but others were seen which had been destroyed by some enemy.

¹ The specimens are not "yellowish gray," as von Martens described it, but between walnut brown and burnt umber.

LEPTINARIA LIVINGSTONENSIS, n. sp.

The shell is imperforate, oblong-conic, the length twice the diameter, pale yellow, composed of 6 moderately convex whorls. Apex rather obtuse, surface glossy, coarsely but weakly striate. The sharp outer lip is strongly arched forward at its upper third. Columellar plait strong, dividing the columellar margin into two arcs, the lower one slightly shorter and deeper. Parietal lamella present in the embryos of $1\frac{1}{2}$ whorls. It is quite strongly developed in some shells of 6 mm. long, wanting in others. In older shells it becomes very low, and not quite one-fourth of a whorl long; or in others it disappears entirely.

Length 9.5, diam. 4.7, aperture 4.5 mm. (lamella low).

Length 11, diam. 5, aperture 5 mm. (lamella minute).

Found in rubbish about the city of Livingston, Guatemala, with *Subulina octona*, taken February 19, 1913. This shell is about the same size as *L. tamaulipensis*, but differs from that species by having a parietal lamella and an imperforate umbilical region. The last whorl is less enlarged than in *L. lamellata*, *L. elisæ* or *L. convoluta*, which resemble this species in being imperforate with a lamellate parietal wall.

The small lot taken in 1913 seemed divisible into two species, according to whether a parietal lamella was present or not, but in the abundant series collected on the second trip, it appears that the lamella is variable, being present in many but not all immature shells, but always very low or wanting in the large ones.

SOME NOTES ON PHILOMYCUS.

BY V. STERKI.

In Ohio we had known only *P. (Tebennophorus) carolinensis* Bosc. Then a few *dorsalis* Binney were found here and there. Some years ago, near Chippewa Lake, Medina Co., I found two specimens of an entirely distinct species, as listed in the Ohio catalogue; the genitals, etc., remain to be examined. The slug may be the same as *P. pennsylvanicus* Pils., but closer comparison is necessary.